

PROJECT PRIORITIZATION TEAM (PPT)

October 10, 2003

1:00 PM – 3:00 PM

NYISO Washington Ave. – Room WA

Dial In #: 303-262-2240

Participant Code #: 613887

Meeting Agenda

- | | | |
|--|---|----------------|
| ➤ Meeting objectives | Joe Oates | 1:00 PM |
| ➤ Review of action items | Tim Schmehl | 1:05 PM |
| ➤ Status of project-related incentive goals | Larry Farney | 1:20 PM |
| ➤ Status of prioritized projects | Tim Schmehl
Rich Dewey | 1:30 PM |
| ➤ Discussion about 2004 projects | Tim Schmehl | 2:00 PM |
| ➤ Report on projects budget | Mary McGarvey | 2:30 PM |
| ➤ New business | Joe Oates | 2:45 PM |
| ➤ Schedule/agenda items for next meeting | Joe Oates | 2:55 PM |
| ➤ Adjourn | | 3:00 PM |

Meeting materials:

Agenda

Action Items List

Projects Portfolio

SMD Executive Dashboard

2003 Project Budget Report

PPT Action Items

Updated 10/08/03
(Changes since last meeting in **RED**)

ID#	Initiated	Action Needed	Assignee	Target Date	Status
52	09/10/03	Provide update on method and data needed from LIPA to process billing for Cross Sound Cable when power flows NY to CT (north). Our current system handles flows south using a gen bus. A plan to handle flows north has been proposed to LIPA. It will require LIPA to enter appropriate flow data into the WBR application and that the flow would be viewed as an internal load. Adjustment will need to be made for regulation and black start costs, as these are not charged to exports. Business rule changes will be needed for the LBMP calculation to prevent gaming opportunities. Further discussion with LIPA is in progress.	T. Duffy	10/10/03	Open
50	5/22/03	Provide a monthly report to PPT on progress made with the Reserve Pick-up application. RPU process and reports have worked as designed for all intervals in September. Reporting has been circulated internally to the NYISO. Operations is monitoring the reports and if no further problems are found in October then they will request that the processes for reporting the results to generators be activated in November. Requirements for RPU under SMD have been completed and are under review by Operations.	J. Hickey	Report each month	Open
44	4/10/03	Evaluate if A649 (Oracle 9i upgrades) should be broken into separate projects. Also, set A649 to priority 7 thus moving projects 2 – 7 move up in priority. BAS upgrade is next milestone. The BAS upgrade has been delayed until November due to hardware procurement and installation. After the BAS deployment there will be several smaller system upgrades however it does not seem appropriate to divide these into separate projects. This work is not expected to impact any market related projects due to the resources involved.	L. Farney	10/17/03 8/27/03 5/27/03	Open
46	4/10/03	Integrate the “Project Description”, “Project Status” and “Project Tracking” reports into a single comprehensive report. This will be addressed over next several months. A prototype report is to be developed to satisfy BS&P (new guideline) and PPT. An upgrade	T. Schmehl	10/10/03 09/30/03 5/27/03	Open

		of our project scheduling and time reporting software applications occurred this week. The new versions of software will facilitate developing consolidated reports. A prototype should be available for the November PPT.			
1	12/04/02	BIC requested consideration of: Steam units being turned off at day's end but needed next day for reserves. Perform an assessment of options (LECG) and develop order of magnitude estimate of effort required. Issue was discussed at the 8/29 NYISO-NY Generators meeting. Staff proposed potential generator actions to relieve this concern. Additional steps, as necessary, will be evaluated at a future NYISO-NY Generators meeting (or SPWG). Any future software project identified would be post-SMD. Ray to provide report after conferring with MSWG.	R. Stalter	10/10/03 08/27/03 4/30/03	Open
Items Closed at Last Meeting					
51	5/22/03	Prioritize A676 DAM Congestion Reduction Shortfall following Board review. MC approved motion on June 18 th . Customer Settlements will implement a manual method for billing. Project A676 to automate the process will be post SMD.	T. Schmehl	09/10/03 7/02/03	Closed 09/10/03
48	5/22/03	Clarify the resource requirements for the new components added to RS1 85/15. A636 RS1 85/15 automation will be deferred to post SMD. EDRP, TSA and QSR combined into new project A686 New Billing Allocations that will be implemented in Consolidated Invoice application. Created new project A687 Local Black Start which is now on hold.	J. McGinnis	09/10/03 7/02/03	Closed 09/10/03

NYISO Projects Portfolio Status Report

The project portfolio has been rearranged into three categories: Priority Projects, Second Tier Projects, and Studies & Training Projects. This report provides summary information about Priority Projects and Second Tier Projects as reviewed with the Project Prioritization Team (PPT) on September 10, 2003. Studies & Training Projects are not included in this report since they are internally focused.

The current priority of each project is identified below along with an explanation of any change in categorization and priority since the previous PPT meeting that occurred on July 22, 2003. Please refer to the accompanying Projects Portfolio (Gantt chart) for the latest scheduling and deployment information. This information is updated monthly in preparation for the scheduled PPT meetings.

Priority Projects

A639 2003 SAS 70 Type 2 Audit

- KPMG has begun their fieldwork for the 2003 audit that spans from July to December.
- Designated as “exempt” priority meaning that resources are made available when and as needed to support the audit.
- The final KPMG report on the 2002 SAS 70 Type audit, project A582, was accepted by the NYISO Board's Audit & Compliance Committee in September.

A600 Open Billing Issues

- The Billing Issues Group (BIG), chaired by the CFO, is responsible for resolving all identified billing issues. The A600 project was established to ensure timely action on internal billing issues (not including external items such as bad or missing metering data). Incentive Goal 7 tracks performance on the timely correction of these internal billing issues. The table below shows the total number of open billing issues as well as those internal items identified by the BIG as Goal 7 issues.

A600 – Open Billing Issues Status				
August	Open Issues at Month Beginning	Closed Issues	New Issues Opened	Open Issues at Month Ending
All issues	57	8	4	53
Goal 7 issues	4	3	3	4

(Source Billing Issues Group weekly report)

A583 Billing System Improvements Phase 2

- Web based reconciliation was deployed successfully on August 13.
- Additional features will be deployed in mid to late-October.
- Designated priority # 2 (no change from previous report)

A649 Oracle 9i Upgrades

- This project will accomplish an upgrade of the Oracle software on all NYISO systems.
- The FRS is complete and has been approved by the Project Sponsor.
- Analysis and documentation of Autosys script changes was completed
- Additional ESS storage has arrived and been configured.

- The QA server to be used to test the upgrade of BAS is on-line and configured.
- Upgrade of BAS to Oracle 9i is expected by late October.
- Designated priority # 3 – was formerly priority # 1 under Infrastructure projects.

A683 BEA Upgrade

- This project will accomplish an upgrade of the BEA (vendor name) software that is used on all NYISO web site servers.
- The upgrade will be performed in two phases: the first phase will upgrade to BEA software to version 8.1 and the second phase will be implementation of clustering.
- The first phase, upgrade to BEA 8.1, was successfully deployed on Sept. 30.
- Scheduling of the second phase is now being reviewed to assess the timing and impact on the SMD project.
- Designated priority # 4 - was formerly priority # 2 under Infrastructure projects.

A668 Scheduling and Pricing Noncompetitive Proxy Interfaces

- Project is currently in Phase G – Closure
- The final deliverable, implementing the bid production cost guarantee, was deployed on Oct. 1 however it has not been activated pending FERC approval.
- The project will remain on hold until FERC approval is received and the software code is activated and validated.
- Designated priority # 5 – was formerly priority # 2.

A620 AMP IV including Start-up and Min Gen Mitigation

- Project is currently in Phase C – Design.
- AMP IV will be incorporated into SMD phase 1.
- Designated priority # 6 - was formerly priority # 13 under Strategic Development projects. This change is required as a result of the decision to incorporate AMP IV into the initial SMD deployment. AMP IV will not be implemented in the current market system.

A688 Inadvertent Package Replacement (new)

- Project is currently in Phase E – System Operational / Functional Test.
- This project is required to replace the current inadvertent interchange billing application that will be eliminated when SMD is deployed.
- A prototype applications has been developed and is being tested by the business owner
- Designated priority # 7

A574 SMD 2.0 Ranger Tracking

- Four weeks of Factory Acceptance Tests (FAT) have been completed and the remainder of the tests are proceeding according to plan with minor variation.
- All testing tracks are now active with the exception of BMS.
- Design processes for Phase II have initiated and are now in review
- Designated priority # 8 - was formerly categorized as priority # 1 under Strategic Development projects. This project and A573 that follows are the highest priority initiatives. Projects prioritized ahead of these projects reflect the fact that they are dependencies for SMD completion.

A573 SMD 2.0 Market Systems Implementation

- MIS/BAS interfaces are in Phase D – Build/Unit-Sub System Test.
- MIS/BAS rules changes are in Phase D – Build/Unit-Sub System Test.
- The PTS replacement is in Phase D – Build/Unit-Sub System Test.
- Price Verification is in Phase D – Build/Unit-Sub System Test.
- MMRD is in Phase D - Build/Unit-Sub System Test
- Probe support is in Phase B – Concept.
- The new Load Forecaster is in Phase D – Build/Unit-Sub System Test
- Designated priority # 9 - was formerly categorized as priority # 1 under Strategic Development projects. This project and A573 that follows are the highest priority initiatives. Projects prioritized ahead of these projects reflect the fact that they are dependencies for SMD completion.

A647 Station Power Accounting

- Project is currently in Phase C – Design
- Completion of the FRS and SDS is dependent upon resolution of issues surrounding the Ancillary Service charges.
- MIS portion of development is complete and pending deployment into the QA test environment.
- A Users' Guide is being developed and a separate sub-team has been put in place to begin its creation. MP's have been informed of this effort and their feedback has been requested.
- Designated priority # 10 - was formerly categorized as priority # 7. The change in priority reflects the fact that this project will be implemented in the Consolidated Invoice application thus allowing more time for deployment.

A686 New Billing Allocations (EDRP, TSA, QSR) (new)

- Project is currently in Phase C – Design.
- The SDS is currently under development.
- This project will enable billing for emergency demand response program, thunderstorm alert, and quick start reserves. It is also intended to provide an interim capability to bill for DAM Congestion Reduction Shortfall (separate project A676 will address the full automation of this).
- Designated priority # 11. This project will be implemented in the Consolidated Invoice application and is prioritized accordingly.

A559 EAI Phase II

- Phase C (Design) activities for SMD2 interfaces are concluding as designs are formally reviewed and approved. Phase D (Development) activities for SMD's EAI interfaces continue.
- Portal's final Phase F (Deployment) activities such as training and documentation updates are concluding. Portal deployed to Market Participants on 9/25/2003 after successfully completing the User Acceptance Test.
- Work Scheduling continues Phase C (Technical Design) as BMC's Control-M application is tested against SMD2 requirements.
- EAI components to support the OSS PJM Ramp solution successfully completed Phase E (QA/System Test) and are being deployed to production infrastructure.

- Environments are currently being implemented at the PCC to provide the platform for testing the SMD2 EAI interfaces.
- Designated priority # 12 - was formerly categorized as priority # 4 under Strategic Development projects.

A661 DSS Settlements Datamart II and A662 DSS Settlements Datamart III

- Combined to facilitate development, testing and deployment
- Successfully deployed on October 4.
- Designated priority # 14 - was formerly categorized as priority # 9 under Strategic Development projects.

A663 DSS Settlements Datamart IV

- Functional requirements nearing completion.
- Design, Development and QA progressing according to Plans
- Deployment scheduled for mid December.

A657 ICAP Prescheduling (formerly known as OSS SMD Support)

- Development complete, pending stabilization testing.
- Targeted for integration with SMD SAT testing in November 2003.
- Designated priority # 16 - was formerly categorized as priority # 5 under Strategic Development projects.

A541 TCC Online Auction Automation

- Project is currently in Phase D – Elaboration.
- Use Case requirements documenting nearing completion.
- Design and implementation will be done after work is completed on A543 UCAP Auction Automation.
- Designated priority # 17 – was formerly categorized as priority # 9.

A543 UCAP Market Automation

- Project is currently in Phase E – Construction Phase
- Architecture prototype completed.
- Construction of high priority use cases in progress.
- Designated priority # 18 – was formerly categorized as priority # 10.

A658 Facilitated Checkout (formerly known as OSS 2nd Node)

- Functional pilot with ISO-NE was successful. ISO-NE reported "better data service" then available through previous exchange methods.
- IMO now accessing FCO Web Service for pilot testing.
- ISO-NE has implemented FCO Web Service (not yet released externally, pending security review and approval).
- Launched collaborative specification / development process with ISO-NE, IMO, HQ, PJM, and MISO through NPCC.
- All Northeast control areas agreed to target implementation of FCO web service for transaction data exchange by the end of 2003.
- Second release of FCO service with additional features (requested by neighbor CAs) on hold pending closure on final specification.

- Development of NYISO operator application progressing well with initial Operations review scheduled for week of 10/20.
- Designated priority # 19 - was formerly categorized as priority # 8 under Strategic Development projects.

A659 PJM Ramp Integration in OSS (formerly known as OSS 1.x Enhancements)

- Successfully deployed to production on September 30.
- PJM Ramp data now integrated into OSS advisory ramp displays and preschedule bid pre-validation.
- Project closure phase underway.
- Designated priority # 20 - was formerly categorized as priority # 7 under Strategic Development projects.

A660 E-Tagging Integration (formerly known as OSS Online Presence)

- FRS complete and reviewed by business stakeholders.
- Technical design complete, reviewed, and approved.
- Development for Operations use cases (intelligent approve tag and automated tag updates) underway.
- Targeting late Q4 implementation.
- MP functionality (enhanced tagging related tools) to follow in 2004.
- Designated priority # 21 - was formerly categorized as priority # 11 under Strategic Development projects.

A674 Facilities Management

- Construction to build out the ACC and Dispatcher training at the Wolf Road facility is proceeding and expected to be completed in October.
- Additional SMD2 hardware arrived at both the PCC and at Wolf Road. ABB was on-site to perform the installations the week of August 18.
- Work on the Sonnet Ring continues and is expected by mid October.
- Designated priority # 22 - was formerly categorized as priority # 5 under Infrastructure projects.

A556 Documentum Implementation

- Responses to the RFP were received on Sept. 16 and have been reviewed.
- The contract will be awarded on Oct. 3.
- The selected vendor will be on-site to begin the implementation by Nov. 3.
- Designated priority # 23 - was formerly categorized as priority # 4 under Infrastructure projects.

Second Tier Projects

Projects designed as Second Tier are considered lower priority than those described above. Work may proceed on these projects provided there are no resource conflicts with the higher prioritized projects or if outside resources can be used.

A619 TransEnergie Cross Sound Cable

- Project is currently in Phase C – Design.
- NYISO is actively exploring the use of a third party to provide the secondary service scheduling.
- This project was formerly categorized as priority # 8.

A636 85/15 Schedule 1 Split - Phase 1

- This project has been postponed because the code could not be developed, tested and implemented prior to a mid-November deadline on changes to the MIS and BAS applications. This deadline was established by NYISO to ensure that the SMD project interface with MIS and BAS can be completed to support the April 2004 schedule.
- Customer Settlements will continue to calculate this component of customer bills manually until a software solution is made available.
- This project was formerly categorized as priority # 3.

A685 85/15 Schedule 1 Split - Phase 2 (new)

- Project is delayed pending availability of resources

A664 DSS Market Monitoring Datamart I

- Requirements development has been postponed until 2004.

A689 Intermediate Data (new)

- The requirements for this project are currently being reassessed.
- Depending upon the analysis of the requirements, this project may be put on hold

A687 Local Black Start (new)

- Project is delayed pending availability of resources

A690 Grouped Units (new)

- Project is delayed pending availability of resources

A564 Bi-directional Modeling of Generation

- Primary deliverables have been incorporated into A647 Station Power project.
- Full implementation will be deferred, however accommodation of the Niagara unit will be addressed in A647 Station Power project.
- This project was formerly categorized as priority # 11.

A625 Direct Generator Communications Implementation

- Project is delayed pending availability of resources

A675 Billing Simulator

- A feasibility study is being completed, however design and implementation of this project is delayed pending availability of resources

A630 Mechanize Grid Accounting Voltage Support

- Project is delayed pending availability of resources.

A676 DAM Congestion Shortfall Reduction

- Interim capability to bill for DAM Congestion Reduction Shortfall will be implemented as part of A686 New Billing Allocations.
- Automation of the billing process is delayed pending availability of resources.

A637 GT Management II / Persistent Dragging

- The deliverables related to Persistent Dragging were deployed in June.
- Two additional deliverables will not be completed at this time:
 - Modify the MIS OOM package to allow the dispatchers to de-rate units as a group.
 - Modify VN1 to correct a problem 30-minute GTs have at the top of the hour.
- After the SMD project is completed, these issues will be reassessed.
- This project has been closed.

2004 Projects

The following new projects have been identified for 2004 and are included in the proposed budget. The priority of these projects will be established over the coming weeks for review by the PPT.

A699 MDEX Enhancements (new)

Description:

Building on the Market Data Exchange (MDEX) released in 2003, NYISO will expand the capabilities for delivery of information and reorganize the presentation of system and market conditions. Includes enhanced security features for content access and online help.

Primary Driver:

Market Participant mandates for improvements to the usability of the NYISO website as passed through various committee resolutions drive the MDEX solution. This will facilitate the flow of information between NYISO and its market participants. Establishing protocols to secure information via the web required by market participants and DOE.

Deliverables:

- Improved access of operational data, including real-time, SMD and outage information
- Addition of external market data from ISO-NE, PJM and others
- Consolidation of web content including generation and load bidding to single user interface
- Expansion of security capabilities to facilitate groups and data access methods
- Continued migration towards single sign-on for accessing all NYISO information

Benefits:

- Easy to find and customizable information services
- Common look and feel of data presentation, including data from other markets
- Reduction in the number of NYISO accounts for a MP while maintaining security
- Improved time-to-market solutions

A700 Computer System Availability Monitoring (new)

Description:

BMC's Patrol suite provides enterprise level system monitoring for NYISO. It helps to ensure maximum data center reliability, scalability, and manageability while utilizing minimum resources to manage a complex data center(s) environment.

Primary Driver:

Increase system availability & minimize system downtime

Enhance server utilization / optimization

Improve capacity planning capability

Reduce mean time to resolve issues

Maintain a growing and more sophisticated data center with minimum resources

Deliverables / Benefits:

- Service assurance (reliability)
- Real time monitoring; alerts; root cause identification; corrective action suggestions.
- High availability focus
- Service forecast (scalability)
- Increased server utilization & capacity planning capability through data aggregation & analytical evaluation
- Reduced server/ hardware costs
- Service verification (manageability)

- Reporting of actual system service levels to ensure targeted expectations are met or exceeded.
- SLA management / improved customer satisfaction

A701 New Technology Initiatives (new)

Description:

Investigation of new technologies and their appropriateness for NYISO use. Mentoring development staff on new technologies that have been included in the NYISO environment.

Primary Driver:

To continue the migration of the NYISO environment to the most appropriate set of technologies. Continue the concept of continuous improvements, rather than “forklift replacement”.

Deliverables / Benefits:

- Increased portability of software with use of modular/object-oriented components
- Improved Security User Identity management through the use of Policy Servers
- Improved maintainability of system with the introduction of Business Process Management software

A702 Enhanced Market Access and Security (new)

Description:

Develop a centralized user account management system by implementing LDAP (Lightweight Directory Access Protocol). Develop the ability for users to log-in once and access any NYISO application using SSO (Single Sign-On).

Primary Driver:

SAS 70 requirement for adherence to the process recommended by DOE and external auditors. Reduce the risk of mismanaged user identity information. Reduce the number of unique log-in interfaces for NYISO users.

Deliverables / Benefits:

- Guarantee uniform enforcement of user access
- Reduce the effort to manage user identity information
- Provide user access decision as a service to all applications rather than building it into each individual application
- Improve User Experience with a single log-in that allows access to any allowed application

A703 SW Development Lifecycle Tools (new)

Description:

Advance the use of Rational tools and processes within the IT development lifecycle

Primary Driver:

Reduce number of “911” fixes and new application “rework” in the production system
 Increase production system reliability to comply with IT goal of system availability
 Provide a stronger tie between test plans and application requirements/functions

Deliverables / Benefits:

- Improved Quality of Deployed Software
- Increased System Availability
- Improved Software Development Cycle
- Improved Software Testing Cycle

A704 Operational Information to the Marketplace (new)

Description:

This project will provide integrated processes and tools that will improve communication of ongoing system and market conditions, as well as special conditions or unusual events.

Primary Driver:

With better operational information, market participants can make informed decisions about participation in our markets.

Deliverables / Benefits:

- Resources dedicated to communicating information to the market place; labor costs post-2004 are to be determined and will be covered by reallocation of existing resources where possible
- Posting of additional historical, real-time and forward-looking operational information
- Automated notification of unusual events
- Automation of required regulatory and security communications
- Better decision-making capability in response to operational conditions
- Faster response in reaction to changing operational conditions

A705 Inter-ISO Standards for Market Messages (new)

Description:

Develop a set of standard messages for Day-Ahead and Real-time Market data. These messages would be a vehicle for sharing Market data between ISOs and between applications within an ISO.

Primary Driver:

Facilitate sharing of Market data to enable more coordinated Market within a region. The use of standards by BMS vendors will enable ISO to select any vendor rather than be locked into a single vendor.

Deliverables / Benefits:

- Common language for describing SCUC, RTS, and LBMP input/output
- Message management system and repository
- Enhanced efficiency of Grid and Market Operations
- Reduced reliance on specific application vendors
- Reduced staff to manage inter-ISO transactions and cost to MPs to cut transactions
- Eases support for other activities such as Market Monitoring

A706 Develop a Virtual Regional Dispatch (new)

Description:

Initial project is to develop a Virtual Regional Dispatch between NYISO and ISO-NE. The project will allow for in-hour schedule changes based upon price differentials between the ISOs, most likely on a 15-minute basis.

Primary Driver:

Drivers include the need to resolve seams issues in the Northeast and improve the liquidity of the ISO spot markets

Deliverables / Benefits:

- VRD pilot between NYISO and ISO-NE which includes a cross-border instrument.
- Post-2004, savings of 100's of thousands in production costs, and potentially millions in consumers savings (refer to VRD report produced by David Patton)

A707 Assess Options to Shorten Billing Cycle (new)

Description:

To conduct a study identifying constraints which limit the ability to perform sub-monthly invoicing. Identify products and business processes, and develop the implementation plan for providing the capability to perform daily invoicing.

Primary Driver:

Improved ability to manage market uncertainties and credit exposure. Market participants would likely be able to reduce their collateral requirements.

Deliverables / Benefits:

- Recommendations to achieve reduced level of exposure to market participant settlement defaults and lower collateral requirements for market participants
- Load Profiling software for error identification and replacement of reported LSE loan measurements /improved accuracy of LSE bills
- Prioritized list of constraining conditions that prevent daily reconciliations / identifies action plans
- Identification and recommendation for any required metering improvements / Identification of metering and measurement deficiencies

A708 Consolidated NYISO Offices (new)

Description:

This project seeks to secure during 2005 ~150,000 square feet of office space to include administrative offices, alternate control center and back-up IT/disaster recovery functionality. During 2006, this facility would replace the current NYISO locations at Washington Avenue, Wolf Road, and Western Turnpike.

Primary Driver:

Geographical separation of PCC and ACC as well as consolidation of Administration offices

Deliverables:

A single, permanent, fully-functional ACC and IT back-up facility that is sufficiently distant from PCC and capable of housing all of NYISO's employees that are currently located in three geographically-separate leased facilities.

Benefits:

- Minimize the probability of simultaneous loss of the PCC and ACC. Maximize capability to maintain system reliability and Market Operations in the event of disaster.
- Enhanced communication, productivity, and efficiency by centrally locating approximately 300 NYISO employees in a single facility.
- Meeting and conference room capacity with state of the art communications technology, to facilitate/accommodate most NYISO committee meetings.
- Although preliminary estimates indicate potential incremental costs of \$1M per year (after 2005), the goal is to "at least" break even.

Studies & Training Projects


The NYISO Projects Portfolio (Gantt chart) also shows a number of projects under the category Studies and Training. These projects are internal to the NYISO organization and for that reason their individual status and priority is not included in this report.

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004															
								Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1 -- Priority Projects																							
A639	2003 SAS 70 Type 2 Audit	Exempt		RUBIN	BUDD	1	1,574																
A600	Open Billing Issues	1		DUFFY	FRANKOWSKI	1	1,019																
A583	Billing System Improvements - Phase 2	2	11/13/03	MCGINNIS	FRANKOWSKI	3	534																
A649	Oracle 9i Upgrades	3	11/04/03	FARNEY	FELL	2	891																
A683	BEA Upgrade	4	Deployed	FARNEY	FELL	3	230																
A668	Scheduling and Pricing Non-Competitive Proxy Interfaces	5	Pending FERC Approval	PELUSO	KING	3	139																
A620	AMP IV Including Startup & Mingen Mitigation	6		PELUSO	BUDD	1	1,499																
A688	Inadvertent Package Replacement	7	10/24/03	MCGINNIS	FRANKOWSKI	2	207																
A574	SMD 2.0 ABB System Implementation Support	8	11/01/03	MILLS	CALIMANO & KING	2	29,414																
A573	SMD 2.0 Internal NYISO System Implementation	9	11/01/03	SMITH	CALIMANO & KING	2	35,036																
A647	Station Power Accounting	10	12/22/03	VETTER	FRANKOWSKI	2	1,538																
A686	New Billing Allocations (EDRP, TSA, QSR)	11		MCGINNIS	FRANKOWSKI	1	1,509																
A559	SMD 2.0 Integration	12	Deployed	MILLER	FELL	2*	1,569																
A661	DSS Settlements Datamart II	13	Deployed	PETERS	FELL	2	62																
A662	DSS Settlements Datamart III	14	Deployed	PETERS	FELL	2	229																
A663	DSS Settlements Datamart IV	15	12/08/03	PETERS	FELL	2	3,016																
A657	OSS SMD Support (15-Min Schedules and ICAP Prescheduling)	16	11/14/03	MARTIN	FELL	2	5,275																
A543	UCAP Market Automation	17		FITTS	KING	2	13,441																
A658	Facilitated Checkout	18	11/11/03	MARTIN	FELL	2*	2,872																
A659	PJM Ramp Integration in OSS	19	Deployed	MARTIN	FELL	2	3,186																
A660	E-Tagging Integration	20		MARTIN	FELL	1	5,349																
A674	Facilities Management	21		FARNEY	CALIMANO	1	918																
A556	Documentum Implementation	22		FARNEY	SANFORD	1	218																

Legend

Estimate Level

- 1 - Class 100 Estimate Based on Concept of Operations
- 2 - Class 50 Estimate Based on Functional Requirements Specification
- 3 - Class 10 Estimate Based on Detailed Design
- * - Estimate Through Identified Deployments Only




Duration Based Schedule 

Resource Limited Schedule 

Deployment Milestone 

Estimated FRS Completion 


2004

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004											
								Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2 -- Second Tier Projects																			
A619	TransEnergie Long Island Sound Cable	N/A	06/01/04	FITTS	CALIMANO	2	4,576												
A664	DSS Market Monitoring Datamart I	N/A		PETERS	FELL	2	12,000												
A689	Intermediate Data	N/A		MCGINNIS	FRANKOWSKI	1	1,223												
A636	85/15 Rate Schedule 1 Split - Phase 1	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A685	85/15 Rate Schedule 1 Split - Phase 2	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A687	Local Black Start	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A690	Grouped Units	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A541	TCC Online Auction Automation	N/A		FITTS	KING	N/A	N/A												
A564	Bi - Directional Modeling of Generation	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A625	Direct Generator Communications Implementation	N/A		PETERS	FELL	N/A	N/A												
A675	Billing Simulator	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A630	Automate Voltage Support Billing Calculation	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												
A676	DAM Congestion Shortfall Reduction Proposal	N/A		MCGINNIS	FRANKOWSKI	N/A	N/A												

Legend

Estimate Level

- 1 - Class 100 Estimate Based on Concept of Operations
- 2 - Class 50 Estimate Based on Functional Requirements Specification
- 3 - Class 10 Estimate Based on Detailed Design
- * - Estimate Through Identified Deployments Only

Duration Based Schedule 

Resource Limited Schedule 

Deployment Milestone 

Estimated FRS Completion 


2004

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004																
								Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
3 -- 2004 Projects																								
A699	MDEX Enhancements [NEW]	N/A			MURPHY	N/A	N/A																	
A700	Computer Systems Availability Monitoring [NEW]	N/A			FELL	N/A	N/A																	
A701	New Technology Initiatives [NEW]	N/A			FELL	N/A	N/A																	
A702	Enhanced Market Access and Security [NEW]	N/A			FELL	N/A	N/A																	
A703	SW Development Lifecycle Tools [NEW]	N/A			FELL	N/A	N/A																	
A704	Operational Information to the Marketplace [NEW]	N/A			KING	N/A	N/A																	
A705	Inter-ISO Standards for Market Messages [NEW]	N/A			FELL	N/A	N/A																	
A706	Develop a Virtual Regional Dispatch [NEW]	N/A			KING	N/A	N/A																	
A707	Assess Options to Shorten Billing Cycle [NEW]	N/A			FRANKOWSKI	N/A	N/A																	
A708	Consolidated NYISO Offices [NEW]	N/A			RAGOGNA	N/A	N/A																	

Legend

Estimate Level

- 1 - Class 100 Estimate Based on Concept of Operations
- 2 - Class 50 Estimate Based on Functional Requirements Specification
- 3 - Class 10 Estimate Based on Detailed Design
- * - Estimate Through Identified Deployments Only

Duration Based Schedule 

Resource Limited Schedule 

Deployment Milestone 


Estimated FRS Completion 

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004																	
								Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
4 -- Studies & Training																									
A212	2002 New York Area Transmission Review	1		COREY	CALIMANO	2	N/A																		
A680	Annual (2003) New York Area Transmission Review	2	03/01/04	COREY	CALIMANO	2	N/A																		
A037	NYISO/TO Baseline Plan Study - 2001	3		COREY	CALIMANO	2	N/A																		
A213	Class 2002 Cost Allocation	4	10/07/03	COREY	CALIMANO	2	N/A																		
A681	Class 2003 Cost Allocation (Including ATBA and ATRA)	5	10/28/04	COREY	CALIMANO	2	N/A																		
A591	Calpine (was SkyGen) Waterford	6	01/02/04	COREY	CALIMANO	2	N/A																		
A208	NYSEG Solutions So. Glens Falls Expansion (Reimbursable)	7	12/18/03	COREY	CALIMANO	2	N/A																		
A653	SRIS / Global Winds Harvest Prattsburgh Project	8	12/29/04	COREY	CALIMANO	2	N/A																		
A655	SRIS for the Bay Energy Project (Reimbursable)	9	12/31/03	COREY	CALIMANO	2	N/A																		
A678	SRIS for the Conjunction Empire Conn. HVDC Project	10	01/06/04	COREY	CALIMANO	2	N/A																		
A679	SIS for Liberty Proposed Transmission Expansion	11	04/21/04	COREY	CALIMANO	2	N/A																		
A682	NYISO Transmission Planning Process	12	12/28/04	COREY	CALIMANO	2	N/A																		
A617	Develop Transfer Limits for 2002 MARS Study	13		COREY	CALIMANO	2	N/A																		
A618	Develop Access to Historic System Data	14	12/24/03	COREY	CALIMANO	2	N/A																		
A692	NYISO-NYSERDA Wind Generation Integration Study	15	01/06/05	COREY	CALIMANO	2	N/A																		
A694	SRIS for the RG&E 4th Station 80 Transformer	16	12/10/03	COREY	CALIMANO	2	N/A																		
A695	SRIS for Uprates of the Entergy Indian Point Nuc Units [NEW]	17		COREY	CALIMANO	2	N/A																		
A621	Restoration Sensitivity Studies	N/A		WALDELE	CALIMANO	N/A	N/A																		
A645	Operations Reactive Study	N/A		WALDELE	CALIMANO	N/A	N/A																		
A672	Quebec - New York Interconnection Limit Analysis	N/A		WALDELE	CALIMANO	N/A	N/A																		
A673	Athens Generation In-Service Operating Study	N/A		WALDELE	CALIMANO	N/A	N/A																		

Legend

Estimate Level

- 1 - Class 100 Estimate Based on Concept of Operations
- 2 - Class 50 Estimate Based on Functional Requirements Specification
- 3 - Class 10 Estimate Based on Detailed Design
- * - Estimate Through Identified Deployments Only

Duration Based Schedule 

Resource Limited Schedule 

Deployment Milestone 

Estimated FRS Completion 

**NYISO
PROJECTS PLAN
BUDGET VS. ACTUAL BY PROJECT (excluding staffing/labor costs)**

Project ID	Project Description	2002 Actuals	2003 BUDGET VS. ACTUAL STATUS							2004 Projected Budget	Post-2004 Projected Budget	Total Project Cost
			BUDGET			ACTUALS	COMMITMENTS					
			Original	Transfers	Revised	Aug-03	Current	Pending	Total			
<u>SMD & RELATED PROJECTS (i.e. EMS/SCADA, etc.):</u>												
A510	EMS SCADA Implementation	\$ 163,708	\$ -	\$ 68,017	\$ 68,017	\$ 68,017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 231,725
A536	BME/SCD Replacement Design	\$ 4,655,027	\$ -	\$ (6,133)	\$ (6,133)	\$ (47,405)	\$ -	\$ -	\$ -	\$ (41,272)	\$ -	\$ 4,648,894
A573	SMD 2.0 Internal NYISO Systems Implementation	\$ 44,690	\$ 10,150,000	\$ 11,417,878	\$ 21,567,878	\$ 14,018,318	\$ 6,305,251	\$ 1,120,000	\$ 7,425,251	\$ (124,309)	\$ -	\$ 21,612,568
A574	SMD 2.0 ABB Systems Implementation	\$ 6,838	\$ 6,500,000	\$ (6,454,284)	\$ 45,716	\$ 35,318	\$ 6,366	\$ 3,000	\$ 9,366	\$ (1,032)	\$ -	\$ 52,554
A612	Improved SCUC Performance	\$ 38,937	\$ -	\$ 34,091	\$ 34,091	\$ 16,691	\$ 17,400	\$ -	\$ 17,400	\$ -	\$ -	\$ 73,028
A673	Simulator & Test System Implementation	\$ -	\$ 5,550,000	\$ (5,550,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
n/a	New office space	\$ -	\$ 3,659,000	\$ (261,877)	\$ 3,397,123	\$ 1,943,121	\$ 1,008,135	\$ 240,375	\$ 1,248,510	\$ (205,492)	\$ -	\$ 3,397,123
TOTAL		\$ 4,909,200	\$ 25,859,000	\$ (752,308)	\$ 25,106,692	\$ 16,034,060	\$ 7,337,152	\$ 1,363,375	\$ 8,700,527	\$ (372,105)	\$ -	\$ 30,015,892
<u>OPEN SCHEDULING SYSTEM (OSS):</u>												
A545	OSS / External Transaction Ramp Management System	\$ 2,134,246	\$ -	\$ 839,266	\$ 839,266	\$ 594,195	\$ 245,071	\$ -	\$ 245,071	\$ -	\$ -	\$ 2,973,512
A550	Online Presence II	\$ -	\$ 2,000,000	\$ (2,000,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A657	OSS Sub Project - SMD 2.0 Support	\$ -	\$ -	\$ 794,394	\$ 794,394	\$ 580,246	\$ 214,148	\$ -	\$ 214,148	\$ -	\$ -	\$ 794,394
A658	OSS Facilitated Checkout	\$ -	\$ -	\$ 422,559	\$ 422,559	\$ 323,481	\$ 99,078	\$ -	\$ 99,078	\$ -	\$ -	\$ 422,559
A659	OSS PJM Ramp Integration	\$ -	\$ -	\$ 236,214	\$ 236,214	\$ 206,994	\$ 29,220	\$ -	\$ 29,220	\$ -	\$ -	\$ -
A660	OSS E-Tagging Integration	\$ -	\$ -	\$ 1,136,385	\$ 1,136,385	\$ 310,385	\$ 759,672	\$ -	\$ 759,672	\$ (66,328)	\$ -	\$ -
TOTAL		\$ 2,134,246	\$ 2,000,000	\$ 1,428,818	\$ 3,428,818	\$ 2,015,301	\$ 1,347,189	\$ -	\$ 1,347,189	\$ (66,328)	\$ -	\$ 4,190,465
<u>DATA WAREHOUSE:</u>												
A548	Decision Support System II	\$ 4,037,218	\$ 7,230,000	\$ (1,416,626)	\$ 5,813,374	\$ 5,049,469	\$ 691,439	\$ -	\$ 691,439	\$ (72,466)	\$ -	\$ 9,850,592
A661	DSS Settlements Datamart II	\$ -	\$ -	\$ 964,920	\$ 964,920	\$ -	\$ 964,920	\$ -	\$ 964,920	\$ -	\$ -	\$ -
A662	DSS Settlements Datamart III	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A663	DSS Settlements Datamart IV	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
A664	DSS Market Monitoring Datamart I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		\$ 4,037,218	\$ 7,230,000	\$ (451,706)	\$ 6,778,294	\$ 5,049,469	\$ 1,656,359	\$ -	\$ 1,656,359	\$ (72,466)	\$ -	\$ 10,815,512

**NYISO
PROJECTS PLAN
BUDGET VS. ACTUAL BY PROJECT (excluding staffing/labor costs)**

Project ID	Project Description	2002 Actuals	2003 BUDGET VS. ACTUAL STATUS							2004 Projected Budget	Post-2004 Projected Budget	Total Project Cost	
			BUDGET			ACTUALS	COMMITMENTS						OVER/(UNDER)
			Original	Transfers	Revised	Aug-03	Current	Pending	Total				
<u>EAI:</u>													
A559	EAI Phases 1 & 2	\$ 429,437	\$ 2,500,000	\$ 87,574	\$ 2,587,574	\$ 1,689,964	\$ 380,227	\$ 150,000	\$ 530,227	\$ (367,383)	\$ -	\$ -	\$ 3,017,011
A577	EAI Phase 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL		\$ 429,437	\$ 2,500,000	\$ 87,574	\$ 2,587,574	\$ 1,689,964	\$ 380,227	\$ 150,000	\$ 530,227	\$ (367,383)	\$ -	\$ -	\$ 3,017,011
<u>OTHERS:</u>													
A095	Transmission Expansion Planning Study	\$ -	\$ 250,000	\$ (26,357)	\$ 223,643	\$ 42,060	\$ 30,000	\$ 100,000	\$ 130,000	\$ (51,583)	\$ -	\$ -	\$ 223,643
A541	TCC Online Auction Automation	\$ 23,467	\$ -	\$ 574	\$ 574	\$ 574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,041
A543	UCAP Market Automation	\$ -	\$ 1,000,000	\$ (200,000)	\$ 800,000	\$ 496,018	\$ 249,101	\$ -	\$ 249,101	\$ (54,881)	\$ -	\$ -	\$ 800,000
A556	Documentum Implementation	\$ -	\$ 805,000	\$ -	\$ 805,000	\$ 35,974	\$ 61,130	\$ -	\$ 61,130	\$ (707,896)	\$ -	\$ -	\$ 805,000
A561	Control Room Logging Improvements	\$ 9,076	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,076
A580	NERTO Eval. & Plng	\$ 787,980	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 787,980
A582	2002 SAS 70	\$ -	\$ 50,000	\$ 107,000	\$ 157,000	\$ 155,984	\$ 980	\$ -	\$ 980	\$ (36)	\$ -	\$ -	\$ 157,000
A598	SCD/BME Price Convergence	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000
A599	Turbo SDAC	\$ 113,152	\$ 145,000	\$ (43,599)	\$ 101,401	\$ 65,256	\$ 17,934	\$ -	\$ 17,934	\$ (18,211)	\$ -	\$ -	\$ 214,553
A604	MMRD Database Improvements	\$ 587,815	\$ -	\$ 738	\$ 738	\$ 738	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 588,553
A605	Northeast Market Model	\$ 222,525	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 222,525
A639	2003 SAS 70 Type II Audit	\$ -	\$ 250,000	\$ (107,000)	\$ 143,000	\$ -	\$ 140,875	\$ -	\$ 140,875	\$ (2,125)	\$ -	\$ -	\$ 143,000
A665	PJM Model Impact Simulation	\$ -	\$ -	\$ 1,000	\$ 1,000	\$ 638	\$ 362	\$ -	\$ 362	\$ -	\$ -	\$ -	\$ 1,000
A675	Billing Simulator	\$ -	\$ 1,350,000	\$ (494,000)	\$ 856,000	\$ 594,112	\$ 161,888	\$ -	\$ 161,888	\$ (100,000)	\$ -	\$ -	\$ 856,000
WRLS	Wireless Project	\$ -	\$ 130,200	\$ -	\$ 130,200	\$ 8,000	\$ 20,502	\$ 10,000	\$ 30,502	\$ (91,698)	\$ -	\$ -	\$ 130,200
TOTAL		\$ 1,894,015	\$ 3,980,200	\$ (761,644)	\$ 3,218,556	\$ 1,399,354	\$ 682,772	\$ 110,000	\$ 792,772	\$ (1,026,430)	\$ -	\$ -	\$ 5,112,571
TOTALS		\$ 13,404,116	\$ 41,569,200	\$ (449,266)	\$ 41,119,934	\$ 26,188,148	\$ 11,403,699	\$ 1,623,375	\$ 13,027,074	\$ (1,904,712)	\$ -	\$ -	\$ 53,151,451

NOTES:

- Budget and actual costs per project were not tracked prior to 2002.
- The 2002 budget and actual amounts for included in projects A545 (OSS) and A548 (DSS) are net of proceeds from hardware financing facilities.
- The 2004 & Post-2004 budgets by project are currently being reviewed with market participants, and will be added to this schedule after approval of the 2004 Budget.